COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

Reference No. 2610-04

Materials Laboratory
Colorado Department of Transportation
4201 East Arkansas Avenue
Denver, Colorado 80222

PART 1: Completed by Product Representative
PART 2: Completed by CDOT Product Evaluation Coordinator
PART 3: Completed by CDOT Expert Product Evaluator
PART 4: Completed by CDOT Materials Engineer

PART 1

Product name: Epoxy-Tie (ET) Adhesive

Product category: Adhesive\Anchoring\Epoxy

Product representative (name & address):
Simpson Anchor Systems {Craig Schumann}
5151 South Airport Way
Stockton, CA 95206
Phone: (510) 564-1062 FAX: (303) 646-1119

Manufacturer (name & address):
Simpson Anchor Systems
5151 South Airport Way
Stockton, CA 95206
Phone: (800) 999-5099 FAX: (209) 234-3868

Description of product, (be precise, include product differentiation between your products &/or competitor's products):
Epoxy-Tie (ET) is a two component, 1:1 ratio 100% solids epoxy-based adhesive for use as a high strength, non-shrink anchor grouting material. Fully tested in accordance with ICBO AC58 and AC60 acceptance criteria. 10 minute gel time at 77° F. Full cure time: 72 hrs at 40° F; 24 hrs at 80° F. Higher load values than competitive products: Allowable loads (4:1 factor of safety) for 1/2" threaded rod embedded 4-1/4" = 3842 lbs; 5/8" threaded rod embedded 5" deep = 5719 lbs; 3/4" threaded rod embedded 6-3/4" deep = 8865 lbs; 1" threaded rod embedded 9" deep = 11,883 lbs. Bond Strength: 2,030 psi (2 days) & 4,240 psi (14 days). Compressive Yield Strength: 9,174 psi (24 hrs) & 13,390 psi (7 days). Compressive Modulus: 658,200 psi (7 days). ASTM C 881 Type I, II, IV and V, Grade 3, Classes B & C.

Usage of product, (be specific to CDOT highway activities only):
Use for anchoring of threaded rod or rebar dowelling in concrete or masonry base materials. Application: >= 40° F.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
High strength anchoring adhesive that is also very economical. Ideal for applications where high volume and low costs are a concern. 56- ounce pneumatic system can out-perform most bulk dispensing systems reducing labor and equipment costs on the jobsite. Superior in-service temperature sensitivity performance. Can be installed in dry, damp, or water-filled holes. Holes can be oversized up to 150% without reduction in load value. No load reduction in core drilled holes. Can achieve high load values at relatively shallow embedments.

Specifications, (identify specifically those applicable) **& Certificate of Compliance** (submittal required):

- ☐ CDOT :
- ■ ASTM : C 881 Type I, II, IV and V, Grade 3, Classes B & C
- ☐ AASHTO:
- ☐ FHWA :
- ☐ other :

Product testing, (national/independent laboratories) **& Certified Test Report** (submittal required):

- ☐ NTPEP-AASHTO:
- ☐ HITEC or FHWA :
- ☐ FHWA or other :
- ■ other : ICBO Report ER-4945, City of LA RR 25185

State DOT Approvals, (current documentation required):
AZ, NM, OR, UT, WA

Evaluation Procedure, (recommended):

Sample submitted: ■ yes ☐ no ☐ n/a | Materials Safety Data Sheets (MSDS): ■ yes ☐ no ☐ n/a

Notes/Additional Comments
Available in 22 oz. and 56 oz. cartridges, and can be dispensed from a manual or pneumatic tool. Resin and hardener are dispensed and mixed simultaneously through the mixing nozzle. Also available in 4 gallon kits for bulk dispensing. Local representative is available for engineering presentations and jobsite product demonstrations. Contact local rep for catalogs or visit website for additional product information.

Manufacturer's Web-site address: www.simpsonanchors.com

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